



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R08-OAR-2017-0567, FRL-9975-09-Region 8]

Promulgation of State Implementation Plan Revisions; Colorado; Attainment

Demonstration for the 2008 8-Hour Ozone Standard for the Denver Metro/North Front

Range Nonattainment Area, and Approval of Related Revisions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed Rule.

SUMMARY: On May 31, 2017, the State of Colorado submitted State Implementation Plan (SIP) revisions related to attainment of the 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS) for the Denver Metro/North Front Range (DMNFR) Moderate nonattainment area by the applicable attainment date of July 20, 2018. The Environmental Protection Agency (EPA) proposes to approve the majority of the submittal, which includes an attainment demonstration, base and future year emission inventories, a reasonable further progress (RFP) demonstration, a reasonably available control measures (RACM) analysis, a motor vehicle inspection and maintenance (I/M) program in Colorado Regulation Number 11 (Reg. No. 11), a nonattainment new source review (NNSR) program, a contingency measures plan, 2017 motor vehicle emissions budgets (MVEBs) for transportation conformity, and revisions to Colorado Regulation Number 7 (Reg. No. 7). The EPA is also proposing to approve portions of the reasonably available control technology (RACT) analysis. Finally, the EPA proposes to approve revisions made to Colorado's Reg. No. 7 in a May 5, 2013 SIP submission.

This action is being taken in accordance with the Clean Air Act (CAA).

DATES: Comments must be received on or before **[Insert date 30 days after date of publication in the FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R08-OAR-2017-0567, at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Abby Fulton, Air Program, U.S.

Environmental Protection Agency (EPA), Region 8, Mail Code 8P-AR, 1595 Wynkoop Street, Denver, Colorado 80202-1129, (303) 312-6563, fulton.abby@epa.gov.

SUPPLEMENTARY INFORMATION:

I. What Action is the Agency Taking?

As explained below, the EPA is proposing various actions on Colorado's proposed revisions to its SIP that it submitted to the EPA on May 5, 2013, and May 31, 2017. Specifically,

we are proposing to approve Colorado's 2017 attainment demonstration for the 2008 8-hour ozone NAAQS. In addition, we propose to approve the MVEBs contained in the State's submittal. We also propose to approve all other aspects of the submittal, except for certain area source categories and major source RACT, which we will be acting on at a later date. We propose to approve the revisions to Colorado's Reg. 11 and 7, except for Section X.E of Reg. 7, which we will be acting on at a later date. We propose to approve the revisions to Colorado Reg. 7 Sections I, II, VI, VII, VIII, and IX from the State's May 5, 2013 submittal.

The specific bases for our proposed actions and our analyses and findings are discussed in this proposed rulemaking. Technical information that we rely upon in this proposal is contained in the docket, available at <http://www.regulations.gov>, Docket No. EPA-R08-OAR-2017-0567.

II. Background

On March 12, 2008, the EPA revised both the primary and secondary NAAQS for ozone to a level of 0.075 parts per million (ppm) (based on the annual fourth-highest daily maximum 8-hour average concentration, averaged over 3 years) to provide increased protection of public health and the environment (73 FR 16436, March 27, 2008). The 2008 ozone NAAQS retains the same general form and averaging time as the 0.08 ppm NAAQS set in 1997, but is set at a more protective level. Specifically, the 2008 8-hour ozone NAAQS is attained when the 3-year average of the annual fourth-highest daily maximum 8-hour average ambient air quality ozone concentrations is less than or equal to 0.075 ppm. *See* 40 CFR 50.15.

Effective July 20, 2012, the EPA designated as nonattainment any area that was violating the 2008 8-hour ozone NAAQS based on the three most recent years (2008–2010) of air

monitoring data (77 FR 30088, May 21, 2012). With that rulemaking, the DMNFR area was designated nonattainment and classified as Marginal. Ozone nonattainment areas are classified based on the severity of their ozone levels. This is determined using the area's design value. The design value is the 3-year average of the annual fourth highest daily maximum 8-hour average ozone concentration at a monitoring site. *See* 40 CFR part 50, Appendix I. The DMNFR nonattainment area includes Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas and Jefferson Counties, and portions of Larimer and Weld Counties. *See* 40 CFR 81.306. Areas that were designated as Marginal nonattainment were required to attain the 2008 8-hour ozone NAAQS no later than July 20, 2015, based on 2012-2014 monitoring data.

On May 4, 2016, the EPA published its determination that the DMNFR, among other areas, had failed to attain the 2008 8-hour ozone NAAQS by the attainment deadline, and that the DMNFR was accordingly reclassified to a Moderate ozone nonattainment area (81 FR 26697; *see* 40 CFR 81.306). Moderate areas are required to attain the 2008 8-hour ozone NAAQS by no later than 6 years after the effective date of designation, which for the DMNFR nonattainment area is July 20, 2018. *See* 40 CFR 51.903.

III. Analysis of the State's Submission

CAA Section 182, 42 U.S.C. 7511a, outlines SIP requirements applicable to ozone nonattainment areas in each classification category. Moderate area classification triggers additional state requirements established under the provisions of the EPA's ozone implementation rule for the 2008 8-hour ozone NAAQS. *See* 40 CFR part 51, subpart AA. Examples of these requirements include submission of a modeling and attainment demonstration, RFP, RACT, and RACM. Moderate nonattainment areas had a submission deadline of January 1,

2017 for these SIP revisions (81 FR 26697, 26699, May 4, 2016).

Colorado submitted revisions to its SIP to the EPA on May 31, 2017, to meet the requirements of a Moderate area classification for the DMNFR nonattainment area and attain the 2008 8-hour ozone NAAQS. Colorado's proposed SIP revisions consist of the parts listed below.

- 8-Hour Ozone Attainment Plan (OAP), which includes monitoring information, emission inventories, an RFP demonstration, an attainment demonstration using photochemical grid modeling, a weight of evidence analysis, a RACT analysis, a RACM analysis, a motor vehicle emissions I/M program, NNSR program certification, contingency measures, and 2017 MVEBs for transportation conformity.
- Revisions to Reg. No. 7.
- Revisions to Reg. No. 11.

The Reg. No. 7 revisions in the 2017 submission include rule revisions related to the Moderate ozone nonattainment classification and revisions that address the EPA's concerns with previous SIP submittals. In this action, we are also acting on Reg. No. 7 revisions from a May 5, 2013 SIP submission. Reg. No. 11 revisions remove "state-only" references in Part A, regarding Larimer and Weld counties, thereby making the entire motor vehicle inspection and maintenance program federally enforceable.

The provisions we propose to approve meet the requirements of the CAA and our regulations. The specific bases for our proposed actions and our analyses and findings are discussed in this proposed rulemaking. Technical information that we rely on in this proposal is

contained in the docket, available at <http://www.regulations.gov>, Docket No. EPA-R08-OAR-2017-0567.

A. Procedural Requirements

The CAA requires that states meet certain procedural requirements before submitting SIP revisions to the EPA. Specifically, section 110(a)(2) of the CAA, 42 U.S.C. 7410(a)(2), requires that states adopt SIP revisions after reasonable notice and public hearing. For the May 5, 2013 submittal, the Colorado Air Quality Control Commission (AQCC) provided notice in the Colorado Register on September 21, 2012, and held a public hearing on December 20, 2012. The Colorado AQCC adopted the SIP revisions on December 20, 2012. The SIP revisions became state-effective on February 15, 2013. For the May 31, 2017 submission, the Colorado AQCC provided notice in the Colorado Register on July 29 and August 29, 2016 and held a public hearing on the SIP revisions on November 17, 2016. The Colorado AQCC adopted the SIP revisions on November 17, 2016. The SIP revisions became state-effective on January 14, 2017. Colorado met the CAA's procedural requirements for reasonable notice and public hearing.

IV. EPA's Evaluation of Colorado's Submission

A. Monitoring

Ozone monitoring data are used as a basis for photochemical grid modeling in the attainment demonstration. The EPA requirements for ambient monitoring are in 40 CFR part 58. Colorado collected ozone monitoring data in accordance with these requirements and with the EPA's "Quality Assurance Handbook for Air Pollution Measurement Systems, Vol. II—Ambient Air

Quality Monitoring Program”¹; the Colorado Air Pollution Control Division’s (APCD) Quality Management Plan² and Quality Assurance Project Plan³; and Colorado’s monitoring network plan.⁴

The monitoring section of Colorado’s OAP includes:

- Information on the location of ozone monitors in Colorado, from southern Metropolitan Denver to northern Fort Collins (including Rocky Mountain National Park);
- 4th-maximum monitored 8-hour ozone values from 2006 through 2015, including levels recorded above the 75 parts per billion (ppb) 2008 ozone NAAQS⁵;
- A description of the State’s ambient air quality data assurance program; and
- Relevant 8-hour-average ozone monitoring data and recovery rates from 2006 through September 2015.

B. Emissions Inventories

1. Background

CAA section 172(c)(3), 42 U.S.C. 7502(c)(3), requires that each SIP include a “comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in [the] area.” The accounting required by this section provides a “base

¹ QA Handbook for Air Pollution Measurement Systems: “Volume II: Ambient Air Quality Monitoring Program” (EPA-454/B-13-003, May 2013) (available in the docket). The current version of the Handbook is available at [https://www3.epa.gov/ttn/amtic/files/ambient/pm25/qa/Final Handbook Document 1_17.pdf](https://www3.epa.gov/ttn/amtic/files/ambient/pm25/qa/Final%20Handbook%20Document%201_17.pdf) (EPA-454/B-17-001, Jan. 2017).

² Colorado Department of Public Health and Environment, Quality Management Plan (March 2016), available in the docket.

³ Colorado Department of Public Health and Environment, Quality Assurance Project Plan (July 2015), available in the docket.

⁴ Annual Network Plans available at https://www.colorado.gov/airquality/tech_doc_repository.aspx.

⁵ OAP Table 3.

year” inventory that serves as the starting point for attainment demonstration air quality modeling, for assessing RFP, and for determining the need for additional SIP control measures. An attainment year inventory is a projection of future emissions and is necessary to show the effectiveness of SIP control measures. Both the base year and attainment year inventories are necessary for photochemical modeling to demonstrate attainment. Section D includes additional discussion on how these inventories are used in the attainment modeling.

Colorado’s DMNFR area attainment plan includes a 2011 base year inventory and a 2017 attainment year inventory. The inventories catalog NO_x and VOC emissions, because these pollutants are precursors to ozone formation, across all source categories during a typical summer day, when ozone formation is pronounced. Carbon monoxide (CO) emissions are reported as well, because they also impact ozone chemistry.

In our 2008 ozone NAAQS implementation rule, the EPA recommends using 2011 as the baseline year (80 FR 12264, 12272). In addition, analysis of meteorological conditions in the DMNFR area leads to the conclusion that the summer of 2011 was a “typical” ozone season from a meteorological standpoint. The modeling analysis uses a base year of 2011 to develop the modeling inputs for the base year modeling analysis and model performance evaluation.

2. Evaluation

The 2011 base year emissions inventory and the 2017 attainment year emissions inventory were developed using EPA-approved guidelines for stationary, mobile, and area emission sources. Stationary source emissions data for 2011 were self-reported to the State by individual sources; the State then used the submitted 2011 information to project stationary source emissions for 2017. On-road and non-road mobile source emissions were calculated using

the EPA’s MOVES2014 model combined with local activity inputs including vehicle miles traveled (VMT) and average speed data, as well as local fleet, age distribution, meteorology, and fuels information. Area sources include many categories of emissions. The EPA finds that these sources (including those in the oil and gas sector) were adequately accounted for in the emissions inventory. The methodology used to calculate emissions for each respective category followed relevant EPA guidance^{6, 7}; as applicable, employed approved emission factors and National Emissions Inventory (NEI) data; and was sufficiently documented in the SIP and in the State’s technical support documents (TSD).⁸

Projected future emissions in 2017 were based on anticipated growth, technological advancements, and expected emissions controls that were to be implemented by the 2017 ozone season. Table 1 shows the emissions by source category from the 2011 base year and 2017 attainment year emission inventories.

Table 1– Emissions Inventory Data for Specific Source (tons/avg. episode day⁹)

Description	2011			2017		
	VOC	NO _x	CO	VOC	NO _x	CO
Oil and Gas Sources						
Point Sources Subtotal	14.8	18.1	17.0	16.3	20.6	19.7
Condensate Tanks Subtotal	216	1.1	2.3	78.7	0.6	2.3
Area Sources Subtotal	48.9	22.2	12.9	59.0	44.6	31.4
TOTAL	279.7	41.4	32.2	154	65.8	53.4

⁶ Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations, EPA-454/B-17-003, available at https://www.epa.gov/sites/production/files/2017-07/documents/ei_guidance_may_2017_final_rev.pdf (hereinafter referred to as “Emissions Inventory Guidance”) (July 2017).

⁷ MOVES2014 and MOVES2014a Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity, EPA-420-B-15-093, available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100NN9L.PDF?Dockey=P100NN9L.PDF> (hereinafter referred to as “MOVES Guidance”) (Nov. 2015).

⁸ See Colorado OAP, TSD Part 1, 2011-2017 Mobile and Area Sources Emissions Inventory Development, p. 1202.

⁹ Emissions in Table 1 are reflective of an average summer day.

Point Sources (EGU and Non-Oil and Gas)						
Electric Generating Units (EGUs)	0.7	39.7	3.6	0.4	19.2	2.9
Point (Non-Oil and Gas)	25.9	21.0	14.1	28.0	20.9	14.4
TOTAL	26.6	60.7	17.7	28.4	40.1	17.3
Area Sources (Non-Oil and Gas)						
TOTAL	60.6	0.0	1.4	67.5	-	1.6
Non-Road Mobile Sources						
TOTAL	58.2	75.9	800.2	44.3	54.9	759.7
On-Road Mobile Sources						
Light-Duty Vehicles	90.0	102.5	812.2	52.4	50.3	538.6
Medium/Heavy-Duty Vehicles	3.7	39.6	20.6	2.6	23.0	16.2
TOTAL	93.7	142.1	832.8	55.0	73.3	554.8
Total Anthropogenic Emissions	518.8	320.1	1,684.3	349.2	234.1	1,386.8
Total Biogenic Sources	170.5	6.1	21.6	170.5	6.1	21.6
Total Nonattainment Area Emissions	689.3	326.2	1,705.9	519.7	240.2	1,408.4

Details of Colorado's emissions inventory development are in Colorado's supporting TSD¹⁰. The inventories in the SIP are based on the most current and accurate information available to the State and the Regional Air Quality Council (RAQC) at the time the SIP was being developed. Additionally, the inventories comprehensively address all source categories in the DMNFR nonattainment area, and were developed consistent with the relevant EPA inventory guidance. For these reasons, we propose to approve the 2011 baseline emissions inventory as meeting the requirements of CAA section 172(c)(3), 42 U.S.C. 7502(c)(3). The EPA also finds that the 2017 inventory, which will be used to meet RFP and attainment demonstration requirements, was developed consistent with relevant EPA Emissions Inventory Guidance and

¹⁰ See Colorado OAP, TSD Part 1, 2011-2017 Mobile and Area Sources Emissions Inventory Development, p. 1202.

¹⁰ Emissions in Table 1 are reflective of an average summer day.

MOVES Guidance. Further discussion on RFP and attainment demonstration is provided in their respective sections.

C. Reasonable Further Progress Demonstration

1. Background

Section 182(b)(1) of the CAA, 42 U.S.C. 7511a(b)(1), and the EPA's 2008 Ozone Implementation Rule require each 8-hour ozone nonattainment area designated Moderate and above to submit an RFP demonstration for review and approval into its SIP that describes how the area will achieve actual VOC and NO_x emissions reductions from a baseline emissions inventory. Section 182(b)(1), 42 U.S.C. 7511a(b)(1), which is part of the ozone-specific requirements of Subpart 2 of the CAA's nonattainment plan requirements, requires RFP to demonstrate a 15% reduction in VOC emissions. This requirement applies before the more general Subpart 1 RFP requirements of CAA Section 172(c)(2), 42 U.S.C. 7502(c)(2), which permits a combination of VOC and NO_x emission reductions to show RFP. Colorado has not previously submitted a 15% RFP SIP under Section 182(b)(1). Therefore, on May 31, 2017, the State submitted an RFP demonstration showing VOC emission reductions greater than 15% within six years after the 2011 base year inventory (between 2012-2017).

RFP plans must also include an MVEB, which provides the allowable on-road mobile emissions an area can produce while still demonstrating RFP. The State's RFP submittal included MVEBs for the DMNFR area for the year 2017 (see Chapter 11 of the State's OAP). The MVEBs are discussed in detail in Section *M* of this notice.

2. Evaluation

To demonstrate compliance with RFP requirements, the State compared its 2011 base year VOC emissions inventory against its projected 2017 VOC emissions inventory and demonstrated that the projected milestone year inventory (2017) emissions of VOC will be at least 15% below the 2011 base year inventory. Colorado projects a 32.7% reduction in VOC emissions from 2011-2017 (*see* OAP, Table 25 on page 4-21). As discussed above in section IV.B., the EPA reviewed the procedures Colorado used to develop its projected inventories and found them to be reasonable.

D. Photochemical Grid Modeling

1. Background

Under the 2008 Ozone Implementation Rule, Moderate ozone nonattainment areas are required to demonstrate attainment using “photochemical modeling or another equivalent analytical method that is determined to be at least as effective....” 80 FR at 12268. The EPA explained that “photochemical modeling is the most scientifically rigorous technique to determine NO_x and/or VOC emissions reductions needed to show attainment of the NAAQS.” *Id.* at 12269. Consistent with the 2015 Ozone Implementation Rule, the SIP includes photochemical grid modeling with supplemental analyses to demonstrate that the emissions control strategy leads to attainment of the NAAQS by 2017. The modeling effort was led by the RAQC in coordination with the Colorado Department of Public Health and Environment (CDPHE). The RAQC first developed a modeling protocol¹¹ that describes the model configuration, domain, input data, and analyses to be performed for the SIP. As described in the

¹¹ ENVIRON International Corporation, User’s Guide Comprehensive Air-quality Model with Extensions Version 6.2, available at http://www.camx.com/files/camxusersguide_v6-20.pdf (March 2015).

protocol, the RAQC selected summer 2011 for the attainment demonstration base case model simulation using the 2011 base year emissions inventory. The modeling platform used the Weather Research and Forecasting Model (WRF)¹² to simulate meteorological data fields, and the Comprehensive Air Quality Model with Extensions (CAMx) as the photochemical air quality model. The modeling platform used a high resolution 4-km grid for the State of Colorado, nested within a western U.S. 12-km grid and a 36-km North America CAMx simulation developed by the Western Air Quality Study.¹³ Day-specific boundary conditions for the 36-km CAMx simulation were derived from a 2011 simulation of the MOZART model.¹⁴ The Sparse Matrix Operating Kernel Emissions (SMOKE) model¹⁵ was used to process emissions data, and the Model of Emissions of Gases and Aerosols from Nature (MEGAN)¹⁶ was used to estimate biogenic emissions of VOC and NO_x. The anthropogenic precursor emissions data were based on the 2011 NEI¹⁷ with updates in key source categories, including oil and gas emissions,¹⁸ mobile

¹² Weather Research and Forecasting model web page available at <https://www.mmm.ucar.edu/weather-research-and-forecasting-model>.

¹³ Adelman, Z., Shanker, U., Yang, and Morris, R., CAMx Photochemical Grid Model Draft Model Performance Evaluation Simulation Year 2011, available at http://vibe.cira.colostate.edu/wiki/Attachments/Modeling/3SAQS_Base11a_MPE_Final_18Jun2015.pdf (June 2015); Ramboll Environ, Attainment Demonstration Modeling for the Denver Metro/North Front Range 2017 8-Hour Ozone State Implementation Plan, Draft Modeling Protocol, Prepared for Regional Air Quality Council, available at https://raqc.egnyte.com/dl/gFls58KHSM/Model_Protocol_Denver_RAQC_2017SIPv4.pdf (Aug. 2015).

¹⁴ Emmons, L. K., et al., Description and Evaluation of the Model for Ozone and Related Chemical Tracers, version 4 (MOZART-4), *Geosci. Model Dev.*, 3, 4367, 2010, 3, pp. 43-67 (Jan. 2010).

¹⁵ UNC, SMOKE v3.6.5 User's Manual, University of North Carolina at Chapel Hill, Institute for the Environment, available at <https://www.cmascenter.org/smoke/documentation/3.6.5/html/> (2015).

¹⁶ Sakulyanontvittaya, T., G. Yarwood and A. Guenther. 2012. Improved Biogenic Emission Inventories across the West, ENVIRON International Corporation, available at https://www.wrapair2.org/pdf/WGA_BiogEmisInv_FinalReport_March20_2012.pdf (March 2012).

¹⁷ 2011 NEI web page available at <https://www.epa.gov/air-emissions-inventories/2011-national-emissions-inventory-nei-data>.

¹⁸ See Colorado OAP, TSD Part 1, 2011 and 2017 Oil and Gas Emissions Inventory Development, p. 1429.

and area source emissions,¹⁹ and point source emissions.²⁰ The EPA reviewed each of the modeling documents listed above and determined that the modeling is consistent with the recommendations in the relevant EPA guidance.²¹

2. Evaluation

EPA guidance recommends that model performance be evaluated by comparing model-simulated concentrations to observed concentrations. Model performance evaluation is used to evaluate the model for historical ozone episodes in the base year and to assess the model's reliability in projecting future year ozone concentrations. Using meteorological and emissions data from a historical base period, ozone and other species concentrations predicted by the model are compared to monitored concentrations to evaluate model performance. EPA modeling guidance emphasizes the use of graphical and diagnostic evaluation techniques to ensure that the modeling captures the correct chemical regimes and emission sources causing high ozone. Consistent with the guidance, Colorado's model performance evaluation included a comprehensive suite of graphical and diagnostic evaluation techniques, such as time-series plots of modeled and observed ozone at key monitoring sites, spatial plots of ozone, tabulations of model bias and error metrics, and diagnostic model simulations using sensitivity and source apportionment techniques. The WRF and CAMx configuration and MPE are described in

¹⁹ See Colorado OAP, TSD Part 1, 2011 and 2017 Mobile and Area Sources Emissions Inventory Development, p. 1202.

²⁰ See Colorado OAP, TSD Part 1, 2011 and 2017 Point Source Emissions Inventory Development, p. 1443.

²¹ Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5} and Regional Haze, EPA, available at https://www3.epa.gov/scram001/guidance/guide/Draft_O3-PM-RH_Modeling_Guidance-2014.pdf (Dec. 2014).

Ramboll Environ's 2011 base case modeling and model performance evaluation report,²² which used both quantitative (model performance statistics) and qualitative (graphical displays) MPE approaches. At the four key monitoring sites in the Denver nonattainment area, the model achieved typical performance goals for model bias and error. However, as to the Chatfield monitor, which had the highest ozone design value, the model was biased low for some days in May and June and biased high for some days in July and August. While the model achieved the performance goal, it failed to accurately simulate some of the days with the highest monitored ozone.²³

Because of concerns with model underestimates of ozone on some of the highest days at the Chatfield monitor and other monitoring sites, Colorado performed additional weight of evidence (WOE) analysis to assess model performance and the effect of model performance on the model attainment demonstration, as discussed in Sections E and F below.

E. Modeled Attainment Demonstration

In the modeled attainment demonstration, emissions inventories are developed for the attainment year (here, 2017) that reflect emissions control measures adopted in the SIP as well as other emissions reductions expected to be achieved through federally enforceable national programs, such as reduced tailpipe emissions for mobile sources. The Colorado 2017 emissions

²² Ramboll Environ, Denver Metro/North Front Range 2017 8-Hour Ozone State Implementation Plan: 2011 Base Case Modeling and Model Performance Evaluation, available at https://raqc.egnyte.com/dl/pxHfZAhquy/TSD_2011_BaseCaseModeling%26MPE.pdf (Sept. 2017).

²³ As discussed in EPA guidance, it is normal for an air quality model to have some under-prediction or over-prediction bias and error in modeled ozone because of uncertainties and errors in model input data. The relative response factor (RRF) approach that is recommended in the guidance and that is used in the State's SIP attainment demonstration is designed to correct for bias in the model predictions for ozone.

inventory is described in the RAQC's model attainment demonstration report.²⁴ The photochemical model is then used to simulate air quality using the projected 2017 emissions. Because of the concerns with bias and error in the model performance discussed in the previous section, absolute model results are not used to evaluate attainment. Instead, the model is used in a relative sense by calculating the ratio of the model's future (here, 2017) to base case (here, 2011) predictions at ozone monitors in the nonattainment area. We call these ratios "Relative Response Factors" (RRFs). Future ozone concentrations are then estimated at existing monitoring sites by multiplying the modeled RRF at locations near each monitor by the observation-based, monitor-specific, baseline design value. The resulting predicted future concentrations are then compared with the 2008 8-hour average ozone NAAQS of 75 ppb. If the predicted future concentrations of ozone are lower than 76 ppb at all monitors, attainment is demonstrated.²⁵ The EPA's "Model Attainment Test Software" (MATS, Abt., 2014²⁶) is used to calculate RRFs and to perform the attainment demonstration.

Table 2 summarizes Colorado's 2011 base case design values, the RRFs from the 2017 control measure case modeling, and the projected 2017 future design values. Table 2 shows results for two different approaches for calculating the model RRF. EPA guidance recommends

²⁴ See Colorado OAP, TSD Part 2, Denver Metro/North Front Range 2017 8-Hour Ozone State Implementation Plan: 2017 Attainment Demonstration Modeling, p. 1564.

²⁵ In determining compliance with the NAAQS, ozone design values are truncated to integers. For example, a design value of 75.9 ppb is truncated to 75 ppb. Accordingly, design values at or above 76.0 ppb are considered nonattainment. See p. 100, footnote 34 of Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5} and Regional Haze, EPA, available at https://www3.epa.gov/scram001/guidance/guide/Draft_O3-PM-RH_Modeling_Guidance-2014.pdf (Dec. 2014), and p. 41 of Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze, EPA-454/B-07-002, available at <https://www3.epa.gov/ttn/scram/guidance/guide/final-03-pm-rh-guidance.pdf> (April 2007).

²⁶ Abt Associates Inc., Modeled Attainment Test Software – User's Manual. available at http://www.epa.gov/ttn/scram/guidance/guide/MATS_2-6-1_manual.pdf (April 2014).

that the RRFs be calculated using the maximum modeled ozone in a 3x3 matrix of grid cells surrounding each monitor. The 3x3 matrix is used because of the possibility that errors in model inputs or physics can result in under predictions in the grid cell with the monitor, and because of the possibility that emissions point sources could be located close to the edges of grid cells, as discussed in more detail in the modeling guidance (EPA, 2014, pp. 102-103).

Using the 3x3 RRFs, the maximum projected 8-hour ozone design values for the 2017 control measure case are 76 ppb at the Chatfield and the Rocky Flats North monitoring sites. Thus, the primary model attainment demonstration did not project NAAQS-attaining future design values (that is, less than 76 ppb) at all monitor sites. When the primary model attainment demonstration is close to but fails to attain the NAAQS, EPA guidance recommends that states consider whether it is appropriate to perform an attainment demonstration using a WOE demonstration. Colorado performed a WOE attainment demonstration as described in Section F below.

Table 2 – Current year observed 8-hour ozone Design Values (DVB), Relative Response Factors (RRF) and projected 8-hour ozone 2017 Future Case Design Values (DVBs), from Table 3-1 in Ramboll Environ 2016b

Monitor	County	Base Year (2011) DVB (ppb)	3x3 Grid Array (4 km)			7x7 Grid Array (4 km)		
			RRF	Future Year (2017) DVB (ppb)**	Final 2017 DVB (ppb)**	RRF	Future Year (2017) DVB (ppb)**	Final 2017 DVB (ppb)**
Chatfield	Douglas	80.7	0.9453	76.2	76	0.9391	75.7	75
Rocky Flats North	Jefferson	80.3	0.9493	76.2	76	0.9441	75.8	75
NREL	Jefferson	78.7	0.9591	75.4	75	0.9442	74.3	74
Fort Collins West	Larimer	78.0	0.9179	71.5	71	0.9098	70.9	70
Highland	Arapahoe	76.7	0.9517	72.9	72	0.9431	72.3	72
Welby	Adams	76.0	0.9512	72.2	72	0.9712	73.8	73
Welch	Jefferson	75.7	0.9538	72.2	72	0.9428	71.3	71
Rocky Mountain NP	Larimer	75.7	0.9464	71.6	71	0.9385	71.0	71
South Boulder Creek	Boulder	74.7	0.9477	70.7	70	0.9445	70.5	70

Greeley/Weld Co. Tower	Weld	74.7	0.9422	70.3	70	0.9226	68.9	68
Aspen Park	Jefferson	74.5	0.9389	69.9	69	0.9370	69.8	69
Arvada	Jefferson	74.0	0.9723	71.9	71	0.9495	70.2	70
Aurora East	Arapahoe	73.5	0.9373	68.8	68	0.9367	68.8	68
Carriage	Denver	71.0	0.9695	68.8	68	0.9595	68.1	68
Rist Canyon	Larimer	71.0	0.9248	65.6	65	0.9161	65.0	65
Fort Collins CSU	Larimer	68.7	0.9217	63.3	63	0.9096	62.4	62
DMAS NCore	Denver	65.0	0.9697	63.0	63	0.9522	61.8	61

F. Weight of Evidence Analysis

As noted above, the primary model attainment demonstration predicted future design values of 76 ppb at two monitors (Rocky Flats North and Chatfield), and thus these two monitors are not projected to attain the 75 ppb NAAQS by 2017. EPA guidance recommends a WOE analysis in cases for which future design values are close to the NAAQS, using the following criteria for a WOE attainment demonstration:

- A fully-evaluated, high-quality modeling analysis that projects future values that are close to the NAAQS;
- A description of each of the individual supplemental analyses, preferably from multiple categories. Analyses that use well-established analytical procedures and are grounded with sufficient data should be weighted higher; and
- A written description as to why the full set of evidence leads to a conclusive determination regarding the future attainment status of the area that differs from the results of the modeled attainment test alone.

The WOE analysis can include monitoring and emissions inventory trend analysis; review of the conceptual model for ozone formation in the nonattainment area; additional modeling metrics; alternative attainment test methods; and assessment of the efficacy of SIP-

approved regulations, state-only regulations, and voluntary control measures. Considering this information and applying the criteria described in the guidance, the WOE analysis is then used to assess whether the planned emissions reductions will result in attainment of the NAAQS at the monitors that modeled ozone future design values of 76 ppb or higher.

As part of its WOE analysis, Colorado evaluated the model attainment demonstration using a 7x7 matrix of grid cells around each monitor site, because the model performed better in simulating the 2011 period when monitored concentrations were compared to model results in the 7x7 matrix.²⁷ This performance difference may be a result of challenges in accurately simulating meteorological data in Colorado's complex terrain combined with the use of a high resolution 4-km grid in the Colorado modeling platform. It is possible that small errors in wind speed or wind direction could result in model-simulated plumes being offset by more than 4 km from a monitoring site. When using a 7x7 matrix of grid cells, the monitored concentration is compared to modeled concentrations up to 12 km from the monitor site to assess whether the model more accurately simulated the observed ozone in grid cells close to the monitor site. Table 2 shows that when the model attainment test is performed using the 7x7 matrix, all monitor sites are projected to attain the 75 ppb NAAQS.

Colorado also evaluated high ozone days from 2009 to 2013 that were likely influenced by atypical activities such as wildfire or stratospheric intrusion, but were included in the calculation of the 2011 baseline ozone design value (*see* Table 3; CDPHE, 2016d²⁸). While Colorado did not submit formal demonstrations under the Exceptional Events Rule (40 CFR

²⁷ See Colorado OAP, TSD Part 2, Denver Metro/North Front Range 2008 Ozone Standard Moderate Area State Implementation Plan: Air Quality Technical Support Document (AQTSD), p. 1608.

²⁸ See Colorado OAP, TSD Part 2, Analyses in Support of Exceptional Event Flagging and Exclusion for the Weight of Evidence Analysis, p. 1662.

50.14) for these days because they do not affect the attainment status, which is evaluated based on 2015-2017 monitoring data, these days do affect the baseline design value and thus affect the model projected future design value for 2017. Table 4 shows the revised 2011 baseline design value when the data likely influenced by atypical activities are excluded, and Table 4 also shows the results of the model attainment demonstration using both the 3x3 and 7x7 matrices for calculating the model RRF. All future design values are below the 75 ppb NAAQS using both approaches when data possibly influenced by atypical activities are excluded in the calculation of the 2011 design values.

The EPA concurs with Colorado's assessment that the model was properly configured, met EPA performance requirements, and was appropriately used in its application. The EPA finds that the WOE analysis supports a determination that the area will attain the 75 ppb ozone NAAQS by 2017.

Table 3– Ozone monitoring data flagged as exceptional events and excluded from the 2011 baseline design value in the weight of evidence analysis (Table 1 from CDPHE, 2016d)²⁹

Date	Chatfield	Rocky Flats North	NREL	Fort Collins West	Exceptional Event Type		
					Stratospheric Ozone Intrusion	<u>Wildfire Smoke Influence</u>	
	8-hour Ozone Concentrations (ppb)					Regional	Local
April 13, 2010	79	—	—	—	x		
April 14, 2010	—	—	—	75	x		
June 7, 2011	84	—	—	—	x		
May 15, 2012	—	—	—	76			x
June 17, 2012	—	—	—	77			x
June 22, 2012	—	101	83	93			x
July 4, 2012	96	92	95	76		x	
July 5, 2012	—	88	81	—		x	
August 9, 2012	98	84	88	86		x	
August 21, 2012	80	80	80	—		x	
August 25, 2012	—	80	—	—		x	

²⁹ CDPHE did not identify any exceptional events in 2009 in their weight of evidence analysis.

August 31, 2012	—	—	—	80		x	
August 17, 2013	—	86	84	87		x	

Table 4– Base year (DVB) and 2017 future year (DVF) ozone Design Values (ppb) at key ozone monitors with flagged exceptional event days removed from the 2009-2013 DVB

Monitor	County	Base Year (2011) DVB (ppb)	Exceptional Events Omitted 3x3 Grid Array (4 km)			Exceptional Events Omitted 7x7 Grid Array (4 km)		
			RRF	2017 DVF (ppb)	Final 2017 DVF (ppb)	RRF	2017 DVF (ppb)	Final 2017 DVF (ppb)
Chatfield	Douglas	78.7	0.9453	74.4	74	0.9391	73.9	73
Rocky Flats North	Jefferson	78.7	0.9493	74.7	74	0.9441	74.3	74
NREL	Jefferson	77.7	0.9591	74.5	74	0.9442	73.4	73
Fort Collins West	Larimer	76.3	0.9179	70.0	70	0.9098	69.4	69

G. Unmonitored Area Analysis

The EPA guidance recommends that an “unmonitored area analysis” (UAA) be performed to examine ozone concentrations in unmonitored areas. The UAA is intended to be a means for identifying high ozone concentrations outside of traditionally monitored locations, particularly in nonattainment areas where modeling or other data analyses have indicated potential high concentration areas of ozone outside of the existing monitoring network. This review can help ensure that a control strategy leads to reductions in ozone at other locations that could have base case (and future) design values exceeding the NAAQS were a monitor deployed there. The UAA uses a combination of model output and ambient data to identify areas that might exceed the NAAQS but that are not currently monitored. Colorado used the MATS to perform the UAA and found estimated 2011 ozone DVBS in excess of 76 ppb to the south, west, and northwest of Denver, stretching to Fort Collins and then west of Fort Collins. Colorado also

found that the projected DVFs for 2017 showed all areas have values below 76 ppb. The maximum 2017 estimated design value was 75.9 ppb near the Jefferson/Boulder County border.

H. Reasonably Available Control Technology (RACT) Analysis

1. Background

Section 172(c)(1) of the CAA, 42 U.S.C. 7502(c)(1), requires that SIPs for nonattainment areas “provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology).” The EPA has defined RACT as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available, considering technological and economic feasibility (44 FR 53761, Sep. 17, 1979).

The EPA provides guidance concerning what types of controls could constitute RACT for a given source category by issuing Control Techniques Guidelines (CTG) and Alternative Control Techniques (ACT) documents.³⁰ States must submit a SIP revision requiring the implementation of RACT for each source category in the area for which the EPA has issued a CTG, and for any major source in the area not covered by a CTG.³¹

For a Moderate, Serious, or Severe area a major stationary source is one that emits, or has the potential to emit, 100, 50, or 25 tons per year (tpy) or more, respectively, of VOCs or NO_x (see CAA sections 182(b), 42 U.S.C. 7511a(b); 182(c), 42 U.S.C. 7511a(c); 182(d), 42 U.S.C.

³⁰ See <https://www.epa.gov/ozone-pollution/control-techniques-guidelines-and-alternative-control-techniques-documents-reducing> (accessed Sep. 21, 2017) for a list of EPA-issued CTGs and ACTs.

³¹ See CAA section 182(b)(2), 42 U.S.C. 7511a(b)(2)); see also Note, RACT Qs & As — Reasonably Available Control Technology (RACT): Questions and Answers, William Harnett, Director, Air Quality Policy Division, EPA (May 2006), available at https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20060518_harnett_ract_q&a.pdf.

7511a(d); and 302(j), 42 U.S.C. 7602(j)). For the DMNFR Moderate nonattainment area, a major stationary source is one that emits, or has the potential to emit, 100 tpy or more of VOCs or NO_x. RACT can be adopted in the form of emission limitations or “work practice standards or other operation and maintenance requirements,” as appropriate.³² The Division identified 51 major sources in the DMNFR area, operated by 32 companies. The EPA will be acting on Colorado’s major stationary source RACT submission in a separate action. Colorado did not rely on any emission reductions from major stationary sources in their 2017 modeling analysis. The remainder of this section will address Colorado’s RACT submission related to CTG sources.

2. Evaluation

1. CTG Source Category Sources Addressed in this Action

As part of its May 31, 2017 submittal, the Division conducted a RACT analysis to demonstrate that the RACT requirements for CTG sources in the DMNFR 2008 8-hour ozone nonattainment area have been fulfilled. The Division conducted its RACT analysis for VOC and NO_x by: 1) Identifying all categories of CTG and major non-CTG sources of VOC and NO_x emissions within the DMNFR nonattainment area; 2) Listing the state regulation that implements or exceeds RACT requirements for that CTG or non-CTG category; 3) Detailing the basis for concluding that these regulations fulfill RACT through comparison with established RACT requirements described in the CTG guidance documents and rules developed by other state and

³² See Memorandum, “Approval Options for Generic RACT Rules Submitted to Meet the non-CTG VOC RACT Requirement and Certain NO_x RACT Requirements,” Sally Shaver, Director, Air Quality Strategies & Standards Division, EPA (Nov. 7, 1996), available at https://www.epa.gov/sites/production/files/2016-08/documents/shavermemogenericract_7nov1996.pdf.

local agencies; and 4) Submitting negative declarations when there are no CTG or major non-CTG sources within the DMNFR area.

The EPA has reviewed Colorado's new and revised VOC rules for the source categories covered by the CTGs for the 2008 8-hour ozone NAAQS listed in Tables 5 and 6 and proposes to find that these rules are consistent with the control measures, definitions, recordkeeping, and test methods in these CTGs and applicable EPA RACT guidance.³³ Tables 5 and 6 contain a list of CTG source categories, EPA reference documents, and the corresponding sections of Reg. No. 7 that fulfill the applicable RACT requirements for EPA-issued CTGs.³⁴ Colorado's Reg. No. 7, Control of Ozone Via Ozone Precursors and Control of Hydrocarbons Via Oil and Gas Emissions, contains SIP-approved provisions (*see* 76 FR 47443, Aug. 4, 2011) that meet RACT requirements for the source categories listed in Table 5. Reg. No. 7 also contains general RACT provisions for the CTG source category listed in Table 6. To meet RACT requirements for the source category in Table 6, Colorado submitted several changes to Reg. No. 7 for adoption into its SIP (*see* Section N of this notice).

Table 5– SIP Approved Source Specific Rules Meeting RACT

<i>Source Category in DMNFR Area</i>	<i>CTG Reference Document³⁵</i>	<i>Date of CTG</i>	<i>Chapter 7 Sections Fulfilling RACT</i>
Bulk Gasoline Plants	Control of Volatile Organic Emissions from Bulk Gasoline Plants	1977	Sections V, VI, and XV.

³³ *See* <https://www.epa.gov/ozone-pollution/ract-information>.

³⁴ *See* The EPA's TSD for a full analysis of Colorado's rules as they relate to EPA guidelines and available technical information. We will be acting on the following CTG source categories in a future action: Metal Furniture Coatings, 2007; Miscellaneous Metal Products Coatings, 2008; Wood Furniture Manufacturing Operations, 1996; Industrial Cleaning Solvents, 2006; and Aerospace, 1997.

³⁵ EPA Control Techniques Guidelines and Alternative Control Techniques Documents for Reducing Ozone-Causing Emissions, <https://www.epa.gov/ozone-pollution/control-techniques-guidelines-and-alternative-control-techniques-documents-reducing>.

Equipment Leaks from Natural Gas/Gasoline Processing Plants	Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants	1983	Sections V and XII.
Leaks from Gasoline Tank Trucks and Vapor Collection Systems	Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems	1978	Sections V, VI, and XV.
Leaks from Petroleum Refinery Equipment	Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment	1978	Sections V and VIII.
Manufacture of Synthesized Pharmaceutical Products	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products	1978	Sections V, IX, and XIV.
Oil and Natural Gas Industry ³⁶	Control Techniques Guidelines for the Oil and Natural Gas Industry	2016	Sections V, XII, XVII, and XVIII.
Paper, Film, and Foil Coatings	Control Techniques Guidelines for Film Coatings	2007	Sections V and IX.
Petroleum Liquid Storage in External Floating Roof Tanks	Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks	1978 (ACT 1994)	Sections V and VI.
Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	1977	Sections V and VIII.
Solvent Metal Cleaning	Control of Volatile Organic Emissions from Solvent Metal Cleaning	1977	Sections V and X.
Stage I Vapor Control Systems - Gasoline Service Stations	Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations	1975	Sections V and VI.

³⁶ The EPA published a final CTG on October 27, 2016 to reduce VOC emissions from the oil and gas industry (*see* 81 FR 74798 and <https://www.epa.gov/sites/production/files/2016-10/documents/2016-ctg-oil-and-gas.pdf>). The CTG gives states two years from the date of issuance to submit SIP revisions to address requirements of the oil and gas CTG. Therefore, Colorado did not submit a RACT analysis with their May 31, 2017 submission for this source category.

Storage of Petroleum Liquids in Fixed Roof Tanks	Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks	1977	Sections V and VI.
Surface Coating of Cans	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks	1977	Sections V and IX.
Surface Coating of Coils	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks	1977	Sections V and IX.
Surface Coating of Metal Furniture	Control of Volatile Organic Emissions from Solvent Metal Cleaning	1977	Section V and IX.
Surface Coating of Miscellaneous Metal Parts and Products	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VI: Surface Coating of Miscellaneous Metal Parts and Products	1978	Sections V and IX.
Tank Truck Gasoline Loading Terminals	Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals	1997	Section V, VI and XV.
Use of Cutback Asphalt	Control of Volatile Organic Emissions from Use of Cutback Asphalt	1977	Sections V and XI.

Table 6– General Rules with Proposed SIP Revisions Meeting RACT for Source Category

<i>Source Category in DMNFR Area</i>	<i>CTG Reference document</i>	<i>Date of CTG</i>	<i>Chapter 7 Sections fulfilling RACT</i>
Lithographic Printing Materials and Letterpress Printing Materials	Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing	2006	Sections V and XIII.

The Division also reviewed four ACT VOC source categories to determine if additional VOC reductions could be achieved (*see* section 6.2.4 of the OAP):

1. Organic Waste Process Vents (EPA 1990, ACT);

2. Bakery Ovens (EPA 1992, ACT);
3. Industrial Wastewater Alternative Control Technology (EPA 1994, ACT); and
4. Control of Volatile Organic Compound Emissions from Batch Processes (EPA 1994, ACT).

These four categories were evaluated because they are not addressed by a CTG, federal consumer product rule, or directly by a New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutant (NESHAP) and are not included in a State source-specific RACT provision. Colorado found in its analysis that there are more recent NSPS and NESHAPs that cover the source categories, and that the State has incorporated by reference in Reg. No. 6 and implements. Additionally, Reg. No. 7 establishes work practices and disposal practices similar to the ACTs. Accordingly, Colorado did not identify any additional requirements to include in their RACT analysis through their review of the ACTs.

We have reviewed the emission limitations and control requirements for the above source categories (Tables 5 and 6 in Reg. No. 7) and compared them against the EPA's CTG and ACT documents, available technical information, and guidelines. The emission limitations and control requirements in Reg. No. 7 for the above source categories are consistent with our guidance.

Based on available information, we find that the corresponding sections in Reg. No. 7 provide for the lowest emission limitation through application of control techniques that are reasonably available considering technological and economic feasibility. For more information, see the EPA TSD prepared in conjunction with this action. Therefore, we propose to find that the control requirements for the source categories identified in Tables 5 and 6 are RACT for all affected sources in the DMNFR area under the 2008 8-hour ozone NAAQS.

I. Negative Declarations

States are not required to adopt RACT limits for source categories for which no sources exist in a nonattainment area, and can submit a negative declaration to that effect. Colorado has reviewed its emissions inventory and determined that there are no subject sources for source categories listed in Table 7 in the DMNFR area. We are also unaware of any such facilities operating in the DMNFR nonattainment area, and thus we propose to approve the negative declarations made for the source categories in Table 7 for the DMNFR area under the 2008 8-hour ozone NAAQS.

Table 7– Negative Declarations for CTG VOC Source Categories

<i>Source Category Negative Declarations for DMNFR Area</i>
Auto and Light-Duty Truck Assembly Coatings (2008)
Factory Surface Coating of Flat Wood Paneling
Fiberglass Boat Manufacturing Materials (2008)
Flat Wood Paneling Coatings (2006)
Flexible Packaging Printing Materials (2006)
Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment
Graphic Arts - Rotogravure and Flexography
Large Appliance Coatings (2007)
Large Petroleum Dry Cleaners
Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins
Manufacture of Pneumatic Rubber Tires
Miscellaneous Industrial Adhesives (2008)
Oil and Natural Gas Industry (2016)
Plastic Parts Coatings (2008)
SOCMI Air Oxidation Processes
SOCMI Distillation and Reactor Processes
Shipbuilding/repair
Surface Coating for Insulation of Magnet Wire
Surface Coating of Automobiles and Light-Duty Trucks
Surface Coating of Fabrics
Surface Coating of Large Appliances
Surface Coating of Paper

I. Reasonably Available Control Measures (RACM) Analysis

1. Background

With the attainment demonstration, Colorado submitted a demonstration that the DMNFR area has adopted all RACM necessary to demonstrate attainment as expeditiously as practicable, as required by CAA section 172(c)(1), 42 U.S.C. 7502(c)(1), and 40 CFR 51.912(d). The EPA interprets the CAA RACM provision to require a demonstration that: (1) the state has adopted all reasonable measures (including RACT) to meet RFP requirements and to demonstrate attainment as expeditiously as possible; and (2) no additional measures that are reasonably available will advance the attainment date or contribute to RFP for the area. States should consider all available measures, including those being implemented in other areas, but must adopt measures for an area only if those measures are economically and technologically feasible and will advance the attainment date or are necessary for RFP.

The EPA provided guidance interpreting the RACM requirements of section 172(c)(1) in the General Preamble for Implementation of Title I of the CAA of 1990.³⁷ The EPA explained that states should consider all potentially available measures to determine whether they are reasonably available for implementation in the area, and whether they will advance the attainment date. *Id.* Potentially available measures that would not advance the attainment date for an area are not considered RACM; likewise, states can reject potential RACM if adopting them would cause substantial widespread and long-term adverse impacts. *Id.* Local conditions, such as economics or implementation concerns, may also be considered. To allow the EPA to determine

³⁷ General Preamble, 57 FR 13498, 13560 (April 16, 1992).

whether the RACM requirement has been satisfied, states should provide in the SIP submittals a discussion of whether measures “within the arena of potentially reasonable measures” are in fact reasonably available.³⁸ If the measures are reasonably available, they must be adopted as RACM.

2. Evaluation

To demonstrate that the area meets the RACM requirement, Colorado identified potentially available control measures with input from stakeholders and analyzed whether the measure would be considered a RACM measure. In 2011, the RAQC issued a Report to the Governor that identified and evaluated potential control strategies. Later in 2011, the RAQC and CDPHE evaluated control measures for all source categories that could be implemented over the next five years and included them in a report to the RAQC Board in November 2011. Since 2011, Colorado has adopted oil and gas regulations, implemented Clean Air — Clean Jobs Act³⁹ controls through the Regional Haze SIP, and continued alternative fuels, transportation, and land use programs. In May 2015, the RAQC reconvened discussions with the CDPHE and other partners to review control strategies for the 2008 ozone SIP as well as future SIPs. Three subcommittees made up of RAQC Board members were assembled. Areas of analysis included stationary/areas sources, mobile sources/fuels, and transpiration/land use/pricing/outreach. Subcommittee meetings were open to the public, and stakeholders provided input on the topics discussed.

³⁸ “Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas,” John S. Seitz, Director, Office of Air Quality Planning and Standards, EPA (Nov. 30, 1999).

³⁹ Colo. Rev. Stat. § 40-3.2-201 *et seq.*

Colorado determined that all control measures necessary to demonstrate attainment are currently being implemented. Table 43 of Colorado's OAP lists control measures included in Colorado's SIP as they relate to the State's 2017 emissions inventory, photochemical modeling in the attainment demonstration, and weight of evidence analysis. As discussed in Chapter 7.3.2 of the OAP, the AQCC adopted modifications to Reg. No. 11 to incorporate the portions of Larimer and Weld Counties that are within the DMNFR nonattainment area into Colorado's I/M program. This change was submitted as a SIP revision and is being acted on in this action (*see* section *J* of this notice). Additionally, Chapter 7.3.5.1. describes SIP-strengthening revisions made to Colorado's oil and gas control program in Reg. No. 7 (*see* section *N* of this notice). These revisions include adoption of two "state-only" provisions into the Ozone SIP, pertaining to (1) auto-igniter requirements for combustion devices; and (2) audio, visual, and olfactory inspection of storage tanks and associated equipment.

As part of the RACM analysis, CDPHE examined emission reduction measures (*see* Table 44 of the OAP) being implemented in the DMNFR area that are not included in the SIP modeling and emissions inventory because they are voluntary or difficult to quantify. Non-federally-enforceable emission reduction measures were evaluated for stationary and mobile sources, lawn and garden, outreach and education, and the transportation system. Additionally, Colorado evaluated CAA 108(f), 42 U.S.C. 7408(f) transportation measures (*see* Table 48 of the OAP) to determine whether sources have applied RACM.

Emission measures that were evaluated but determined not to be RACM are discussed in Chapter 7.5 of the OAP. Colorado used the following criteria to determine whether measures were considered RACM:

- Necessary to demonstrate attainment;
- Technologically or economically feasible;
- Implemented successfully in other Moderate areas;
- Could be implemented by January 1, 2017; and
- Could qualify as SIP measures by being quantifiable, enforceable, permanent, and surplus.

Emission reduction measures evaluated for RACM were broken into area sources, on-road mobile sources, non-road mobile sources, fuels, transportation, alternative transportation, and land use categories. Tables 50 and 51 of the OAP summarizes the measures evaluated and Colorado's RACM determination for each measure. Colorado also reviewed the EPA's Menu of Control Measures for NAAQS Implementation⁴⁰ and voluntary and mandatory control measures in other ozone nonattainment areas. Table 53 of the OAP lists control measures identified, and indicates which measures were included in the State's RACM review. Although Colorado's analysis demonstrated that none of the additional measures identified met the criteria for RACM, the State plans to continue evaluating strategies in various areas including fuels, on- and off-road vehicles, and land use.

In its analysis, Colorado evaluated all source categories that could contribute meaningful emission reductions, and identified and evaluated an extensive list of potential control measures. To determine reasonableness and availability, the State considered the time needed to develop and adopt regulations, and the time it would take to see the benefit from these measures. The

⁴⁰ The Menu of Control Measures gives state, local and tribal air agencies information on existing emissions reduction measures, as well as relevant information concerning the efficiency and cost effectiveness of the measures. Available at <https://www.epa.gov/air-quality-implementation-plans/menu-control-measures-naaqs-implementation>.

EPA has reviewed the RACM analysis and finds that there are no additional RACM that would advance the Moderate area attainment date of 2018 for the DMNFR nonattainment area.

Therefore, the EPA proposes to approve Colorado's Moderate area RACM SIP for the DMNFR Moderate nonattainment area.

J. Motor Vehicle Inspection and Maintenance Program (I/M) Program

1. Background

As a Moderate ozone nonattainment area, Colorado is required to implement an I/M program. Colorado's Reg. No. 11 is entitled "Motor Vehicle Emissions Inspection Program" and addresses the implementation of the State's I/M program. Under Reg. No. 11 and state law (5 CCR 1001-13), all eligible automobiles registered in the Automobile Inspection and Readjustment (AIR) program area (the current nine-county AIR program area is depicted in Chapter 8, Figure 27, page 8-3 of the OAP) are subject to periodic emissions inspection. Currently there is an exemption from emissions inspection requirements for the first seven model years. Thereafter, an On-Board-Diagnostics (OBD) vehicle computer inspection is conducted during the first two inspection cycles (vehicles 8 through 11 model years old). Vehicles older than 11 model years are given a dynamometer-based IM240 test for 1982 and newer light-duty gasoline vehicles⁴¹ and a two-speed idle test (TSI)⁴² for 1981 and older light-duty gasoline vehicles. To improve motorist convenience and reduce program implementation costs, the State also administers a remote sensing-based "Clean Screen" program component of the I/M

⁴¹ See 40 CFR Part 51, Subpart S for a complete description of EPA's IM240 test. The IM240 test is essentially an enhanced motor vehicle emissions test to measure mass tailpipe emissions while the vehicle follows a computer generated driving cycle trace for 240 seconds and while the vehicle is on a dynamometer.

⁴² See 40 CFR Part 51, Subpart S for a complete description of EPA's two-speed idle test. The two-speed idle test essentially measures the mass tailpipe emissions of a stationary vehicle; one reading is at a normal idle of approximately 700 to 800 engine revolutions per minute (RPM) and one reading at 2,500 RPM.

program. Remote sensing is a method for measuring vehicle emissions, while simultaneously photographing the license plate, when a vehicle passes through infrared or ultraviolet beams of light. Owners of vehicles meeting the Clean Screen criteria are notified by the respective County Clerk that their vehicle has passed the motor vehicle inspection process and are exempt from their next regularly scheduled IM240 test.⁴³

2. Evaluation

The AIR program and Reg. No. 11 were expanded into portions of Larimer and Weld counties in the Colorado 2009 Legislative session, with the passage of Senate Bill 09-003. The startup date of the I/M program in these two counties was November 1, 2010. The purpose of this expansion of the AIR program and Reg. No. 11 into portions of Larimer and Weld counties was to further reduce vehicle emissions of NO_x and VOC ozone precursors in the 2008 8-hour ozone nonattainment area. The DMNFR was then only classified as a Marginal ozone nonattainment area, and an I/M program was not required in Larimer and Weld counties. Therefore, the State decided to make this portion of the I/M program, for these two counties, a “State-only” provision, and not to submit it as a SIP revision.

With the reclassification of the DMNFR nonattainment area to Moderate for the 2008 8-hour ozone NAAQS, and in light of the associated CAA requirements, the State chose to submit the I/M program in Larimer and Weld counties into the federal SIP. Adding these requirements

⁴³ The Clean Screen program component of Reg. No. 11 was originally approved for implementation in the Denver area with the EPA’s approval of the original Denver carbon monoxide (CO) redesignation to attainment and the related maintenance plan. *See* 66 FR 64751 (Dec. 14, 2001). The Clean Screen criteria approved in 2001 required two valid passing remote sensing readings, on different days or from different sensors and within a twelve-month period. Colorado revised Reg. No. 11 to expand the definition and requirements for a “clean-screened vehicle” to also include vehicles identified as low-emitting vehicles in the state-determined Low Emitting Index (LEI) that have one passing remote sensing reading, before the vehicle’s registration renewal date. These improvements and other associated revisions to the Clean Screen program were approved by the EPA on October 21, 2016. 81 FR 72720.

into the federal SIP required several minor revisions, which were adopted by the Colorado AQCC on November 17, 2016, and submitted to the EPA on May 31, 2017. These revisions involved changes to “PART A: General Provisions, Area of Applicability, Schedules for Obtaining Certification of Emissions Control, Definitions, Exemptions, and Clean Screening/Remote Sensing.” Specifically, definition number 43 was modified to remove the notation that the “North Front Range Area” was a State-only program and not included in the SIP. In addition, Part A, section V, “Expansion of The Enhanced Emissions Program to the North Front Range Area,” was modified to remove the notation that the I/M program was only a State-only program for portions of Larimer and Weld counties and not part of the SIP. By making these changes to Part A of Reg. No. 11, and submitting them for approval by the EPA into the federal SIP, the State made the I/M program in portions of Larimer and Weld counties federally enforceable. Incorporating the formerly State-only portions of the I/M program into the SIP permitted Colorado to include the motor vehicle emissions reductions received from operation of the AIR program in these areas of Larimer and Weld counties in the DMNFR attainment demonstration.

Based on our review and as discussed above, we propose approval of the submitted Reg. No. 11 SIP revisions.

K. Nonattainment New Source Review (NNSR)

1. Background

As a Moderate ozone nonattainment area, Colorado is required to implement a nonattainment new source review (NNSR) program. Applicable NNSR requirements for ozone nonattainment areas are described in CAA section 182, 42 U.S.C. 7511a, and further defined in

40 CFR part 51, subpart I (Review of New Sources and Modifications). Under these requirements, new major sources and major modifications at existing sources must achieve the lowest achievable emission rate (LAER) and obtain emission offsets in an amount based on the specific ozone nonattainment classification. The emission offset ratio required for Moderate ozone nonattainment areas is 1.15 to 1. CAA section 182(b)(5), 42 U.S.C. 7511a(b)(5).

2. Evaluation

The Colorado SIP includes Regulation No. 3, Part D, Section V.A. (Concerning Major Stationary Source New Source Review and Prevention of Significant Deterioration, Requirements Applicable to Nonattainment Areas). This provision requires new major sources and major modifications at existing sources in the DMNFR area to comply with LAER and obtain emission offsets at the Moderate classification ratio of 1.15 to 1. The EPA approved these provisions on January 25, 2016 (81 FR 3963). In addition, in their OAP, Colorado recertified that the State's NNSR program is fully up to date with all requirements of the Marginal designation, including offset ratios of at least 1.1 to 1. Therefore, since the provisions in the Colorado SIP satisfy the CAA NNSR requirements for ozone nonattainment areas classified as Marginal and Moderate, we propose approval of this portion of the OAP.

L. Contingency Measures Plan

1. Background

Nonattainment plan provisions must provide for the implementation of contingency measures. CAA section 172(c)(9), 42 U.S.C. 7502(c)(9). These are specific measures to provide additional emission reductions if a nonattainment area fails to make RFP, or to attain the NAAQS, by the applicable date. Contingency measures must take effect without further action

by the state or the EPA. While the CAA does not specify the type of measures or quantity of emissions reductions required, the EPA has interpreted the CAA for purposes of the Ozone NAAQS to mean that contingency measures should provide additional emissions reductions of 3% of the adjusted base year inventory for the nonattainment area (or the state may implement contingency measures that achieve a lesser percentage that will make up the identified shortfall in RFP or attainment). Contingency measures may include federal measures and local measures already scheduled for implementation, as long as their emission reductions are in excess of those needed for attainment or to meet RFP in the nonattainment plan. The EPA interprets the CAA not to preclude a state from implementing such measures before they are triggered by a failure to meet RFP or failure to attain. For more information on contingency measures, see the General Preamble (57 FR at 13510) and the 2008 Ozone Implementation Rule (80 FR 12264, 12285).

2. Evaluation

To meet the contingency measures requirement, the State identified specific measures that provide emissions reductions in excess of those needed for RFP and for attainment as contingency measures. *See* Chapter 10, Tables 54 and 55 of the OAP. The submitted contingency measures consist of NO_x reductions from two EGUs addressed in the Colorado Clean Air — Clean Jobs Act and previously adopted as part of the Colorado Regional Haze SIP. These two projects are: 1) the retirement of Valmont Unit 5, a 184 megawatt coal fired steam turbine located in Boulder County, and 2) switching the 352 MW coal fired steam turbine of Cherokee Unit 4 located in Adams County from coal to natural gas. The sources completed these projects by the end of 2017 and they will result in an additional 11 tons per day of NO_x reductions, equating to 3.4% of the 2011 base year NO_x emissions inventory. Per EPA guidance for purposes

of the Ozone NAAQS, contingency measures should achieve reductions of 3% of the baseline emissions inventory for the nonattainment area. The State's contingency measures therefore are consistent with Agency guidance, because they in fact result in more than 3% reductions over the relevant baseline. The purpose of the contingency measures is to provide for further emission reductions to make up the shortfall needed for RFP or for attainment, during the period in which the State and the EPA determine whether the nonattainment plan for the area needs further revision to achieve the NAAQS expeditiously.⁴⁴

The appropriateness of relying on already-implemented reductions to meet the contingency measures requirement has been addressed in two federal circuit court decisions. *See Louisiana Environmental Action Network (LEAN) v. EPA*, 382 F.3d 575, 586 (5th Cir. 2004), *Bahr v. United States EPA*, 836 F.3d 1218 (9th Cir. 2016), *cert. denied*, 199 L. Ed. 2d 525, 2018 U.S. LEXIS 58 (Jan. 8, 2018). The EPA believes that the language of section 172(c)(9) is ambiguous with respect to this issue, and that it is reasonable for the agency to interpret the statutory language to allow approval of already implemented measures as contingency measures, so long as they meet other parameters such as providing excess emissions reductions that the state has not relied upon to make RFP or for attainment in the nonattainment plan for the NAAQS at issue. Until the *Bahr* decision, under the EPA's longstanding interpretation of CAA section 172(c)(9), states could rely on control measures that were already implemented (so called "early triggered" contingency measures) as a valid means to meet the Act's contingency measures requirement. The Ninth Circuit decision in *Bahr* leaves a split among the federal circuit courts, with the Fifth Circuit upholding the Agency's interpretation of section 172(c)(9) to allow

⁴⁴ *See* General Preamble, section III.A.3.c (57 FR 13498 at 13511).

early triggered contingency measures and the Ninth Circuit rejecting that interpretation. The Tenth Circuit, in which Colorado is located, has not addressed the issue, nor has the Supreme Court or any other circuit court other than the Fifth and Ninth.

Because there is a split in the federal circuits on this issue, the EPA expects that states located in circuits other than the Ninth may elect to rely on the EPA's longstanding interpretation of section 172(c)(9) allowing early triggered measures to be approved as contingency measures, in appropriate circumstances. The EPA's recently revised Regional Consistency regulations pertaining to SIP provisions authorize the Agency to follow this interpretation of section 172(c)(9) in Circuits other than the Ninth. *See* 40 CFR part 56. To ensure that early triggered contingency measures appropriately satisfy all other relevant CAA requirements, the EPA will carefully review each such measure, and intends to consult with states considering such measures early in the nonattainment plan development process.

As shown in Table 55 of Colorado's OAP, the NO_x reductions projected through 2018 are sufficient to meet the requirements for contingency measures, consistent with the EPA's interpretation of the CAA to allow approval of already implemented control measures as contingency measures in states outside the Ninth Circuit. Therefore, we propose approval of the contingency measure submitted by the state in the OAP.

M. Motor Vehicle Emissions Budget (MVEB)/Transportation Conformity

1. Background

Transportation conformity is required by section 176(c) of the CAA, 42 U.S.C. 7506. Conformity to a SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS (CAA

176(c)(1)(B), 42 U.S.C. 7506(c)(1)(B)). The EPA’s conformity rule at 40 CFR part 93, subpart A requires that transportation plans, programs, and projects conform to SIPs, and establishes the criteria and procedures for determining whether or not they conform. The conformity rule requires a demonstration that emissions from the Metropolitan Planning Organization’s (MPO) Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) are consistent with the MVEB in the control strategy SIP revision or maintenance plan. 40 CFR 93.101, 93.118, and 93.124. The MVEBs are defined as the portion allocated to mobile source emissions out of the total allowable emissions of a pollutant defined in the SIP for a certain date for the purpose of demonstrating attainment or maintenance of the NAAQS or for meeting reasonable further progress milestones.⁴⁵

2. Evaluation

Colorado derived the MVEBs for NO_x and VOCs from its 2017 DMNFR attainment demonstration, and defined the MVEBs in Chapter 11, section 11.4 of the OAP.

Table 8– 2017 NO_x and VOC MVEBs for DMNFR

Area of applicability	2017 NO _x Emissions (tons per day)	2017 VOC Emissions (tons per day)
Northern Subarea	12	8
Southern Subarea	61	47
Total Nonattainment Area	73	55

These MVEBs are consistent with, and clearly related to, the emissions inventory and the control measures in the SIP; are consistent (when considered together with all other emissions sources) with attainment of the 2008 8-hour ozone NAAQS in 2017; and satisfy the minimum

⁴⁵ 40 CFR 93.101; *see* 40 CFR 93.118 and 93.124 for criteria and other requirements related to MVEBs. Further discussion of MVEBs is in the preamble to the transportation conformity rule. 58 FR 62188, 62193–62196 (Nov. 24, 1993).

criteria at 40 CFR 93.118(e)(4). Therefore, we propose approval of the MVEBs as reflected in Table 8. This proposed approval applies to the Northern Subarea and Southern Subarea MVEBs as well as the Total Nonattainment Area MVEBs. The transportation conformity subareas are defined in Chapter 11, section 11.3 of the OAP and are listed below.

- The Northern Subarea is the area denoted by the ozone nonattainment area north of the Boulder County northern boundary and extended through southern Weld County to the Morgan County line. This area includes the North Front Range MPO's (NFRMPO) regional planning area as well as part of the Upper Front Range Transportation Planning Region (TPR) in Larimer and Weld counties.
- The Southern Subarea is the area denoted by the ozone nonattainment area south of the Boulder County northern boundary and extended through southern Weld County to the Morgan County line. This area includes the nonattainment portion of the Denver Regional Council of Governments (DRCOG) regional planning area and the southern Weld County portion of the Upper Front Range TPR.
- Both subareas are further described in the OAP in Figure 29, "8-hour Ozone Nonattainment Area Subareas."

In addition to proposing approval of the MVEBs, we also propose to approve the process described in Chapter 11, section 11.6 in the OAP for the use of the Total Nonattainment Area MVEBs or the subarea MVEBs for the respective MPOs to determine transportation conformity for their respective RTP. As described in section 11.6 of Colorado's OAP, the OAP identifies subarea MVEBs for DRCOG and the NFRMPO. These SIP-identified subarea MVEBs allow either MPO to make independent conformity determinations for the applicable subarea MVEBs

whose frequency and timing needs for conformity determinations differ. As noted in section 11.6, DRCOG and the NFRMPO may switch from using the Total Nonattainment Area MVEBs to using the subarea MVEBs for determining conformity. To switch to use of the subarea MVEBs (or to subsequently switch back to use of the Total Nonattainment Area MVEBs) DRCOG and the NFRMPO must use the process described in the DMNFR OAP in section 11.6 (see pages 11–5 and 11–6). This process of demonstrating transportation conformity to the total or subarea area MVEBs, as described in section 11.6 of the OAP, was previously approved by the EPA for the Denver Ozone Plan for the 1997 8-hour ozone NAAQS (76 FR 47443, Aug. 5, 2011). Now, as to the 2008 8-hour standard, the EPA finds that this process remains consistent with the CAA and with applicable EPA regulations, and therefore proposes to approve it.

N. SIP Control Measures

1. Background

This section describes revisions to Colorado Reg. No. 7 submitted as a part of the SIP, including emission control requirements for oil and gas operations, graphic arts and printing processes, stationary and portable engines, and other combustion equipment. The revisions also establish RACT requirements for emission points at major sources of VOC and NO_x in the DMNFR area.

Reg. No. 7 contains various requirements intended to reduce emissions of ozone precursors. These are in the form of specific emission limits applicable to various industries and general RACT requirements.⁴⁶ The EPA approved the repeal and re-promulgation of Reg. No. 7

⁴⁶ On October 20, 2016, the EPA issued final CTGs for existing sources in the oil and natural gas industry (*see* <https://www.epa.gov/sites/production/files/2016-10/documents/2016-ctg-oil-and-gas.pdf>). In accordance with the

in 1981 (46 FR 16687, March 13, 1981) and has approved various revisions to parts of Reg. No. 7 over the years. In 2008, the EPA approved revisions to the control requirements for condensate storage tanks in Section XII (73 FR 8194, Feb. 13, 2008). The EPA later approved revisions to Reg. No. 7, Sections I through XI and Section XIII through XVI (76 FR 47443, Aug. 5, 2011). Most recently, the EPA approved Reg. No. 7 revisions to control emissions from rich burn reciprocating internal combustion engines in Section XVII.E.3.a (77 FR 76871, Dec. 31, 2012).

Colorado submitted proposed revisions to Reg. No. 7 on May 5, 2013, and submitted revised Reg. No. 7 revisions with the OAP on May 31, 2017. The 2017 revisions address EPA concerns about the May 5, 2013 submittal regarding monitoring, recordkeeping, and reporting requirements in Sections XII.H.5 and XII.H.6 and other concerns in Sections XII.C.1.c, XII.C.1.d, XII.C.2.a.(ii)(B), XII.E.3, and XII.H.4. The May 31, 2017 submittal also includes changes to Reg. No. 7 regarding RACT requirements for lithographic and letterpress printing, industrial cleaning solvents, and major sources of VOCs or NO_x. Colorado made substantive revisions to certain limited parts of Reg. No. 7, particularly Sections X, XII, XIII, XVI and new Section XIX., and also made non-substantive revisions to numerous parts of the regulation. For ease of review, Colorado submitted the full text of Reg. No. 7 as a SIP revision (with the exception of provisions designated “State Only”). The EPA is only seeking comment on Colorado’s proposed substantive changes to the SIP-approved version of Reg. No. 7, which are described below. We are not seeking comment on incorporation into the SIP of the revised

timing set forth in the CTG, Colorado has two years from this date (October 20, 2018) to submit SIP revisions to EPA to update RACT for this source category (see *Memo: Implementing Reasonably Available Control Technology Requirements for Sources Covered by the 2016 Control Techniques Guidelines for the Oil and Natural Gas Industry*, available within the docket for this action).

portions of the regulation that were previously approved into the SIP and have not been substantively modified by the State as part of this submission.

As noted above, Colorado designated various parts of Reg. No. 7 “State Only” and in Section I.A.1.c indicated that sections designated State Only are not federally enforceable. The EPA concludes that provisions designated State Only have not been submitted for EPA approval, but for informational purposes. Hence, the EPA is not proposing to act on the portions of Reg. No. 7 designated State Only and this proposed rule does not discuss them further except as relevant to discussion of the portions of the regulation that Colorado intended to be federally enforceable.

2. Evaluation

a. Analysis of Reg. No. 7 Changes in May 5, 2013 Submittal

The EPA proposes to approve the changes made to Section XII.D (currently SIP-approved Section XII.A.2) with Colorado’s May 5, 2013 submission.⁴⁷

i) Section XII.D

Section XII.D contains an introductory statement regarding the control requirements for atmospheric condensate storage tanks. The changes to current SIP-approved Section XII.A.2 are minor and do not change the substance of the corresponding EPA-approved provisions.

a. Section XII.D.2.a.

Section XII.D.2.a contains the system-wide control requirements for condensate storage tanks. Owners and operators of storage tanks that emit greater than two tons per year of actual

⁴⁷ All other sections of Reg. No. 7 addressed in the May 5, 2013 submission have been superseded by the State’s May 31, 2017 submission. The EPA is not acting on the superseded earlier submissions.

uncontrolled VOCs are subject to the requirements in Section XII.D.2.a. The current SIP provides for a weekly 75% system-wide VOC reduction during the summer ozone season beginning May 1, 2007, and 78% beginning May 1, 2012. The revised section significantly increases the summer ozone season weekly VOC reduction requirements from the current EPA-approved requirements, to 85% beginning in 2010 (revised Section XII.D.2.a.(ix)) and 90% beginning May 1, 2011, and each year thereafter (revised Section XII.D.2.a.(x)). The revised Section XII.D.2.a provides more stringent emission reductions than the current SIP and therefore serves to strengthen the SIP.

b. Analysis by Section of Reg. No. 7 Changes in May 31, 2017 Submittal

i) Sections I, II, VI, VII, VIII, and IX

The changes in these sections are clerical⁴⁸ in nature and do not affect the substance of the requirements. Therefore, we propose to approve the changes.

ii) Section X

Section X. regulates VOC emissions from the use of cleaning solvents. We will be acting on Section X revisions in a future action.

iii) Section XII

Section XII contains emission control requirements for VOCs from oil and gas operations. The State originally reorganized Section XII and included additional control requirements for condensate tanks in their June 18, 2009 SIP submittal. The EPA disapproved revisions to Reg. No. 7, Section XII in our August 5, 2011 rulemaking (76 FR 47443) because of

⁴⁸ When we describe changes as clerical in this proposed action, we are referring to changes like section renumbering, alphabetizing of definitions, minor grammatical and editorial revisions, and changes in capitalization.

deficiencies in Colorado’s proposed revisions (*see* 75 FR 42355, July 21, 2010). The State once again submitted proposed revisions to Section XII with their May 31, 2017 submissions. Table 9 outlines the reorganization/renumbering in Colorado’s proposed revisions to Section XII:

Table 9– Reorganization/Renumbering in Colorado’s Proposed Revisions to Section XII

Proposed section XII numbering	Corresponding EPA-approved section XII numbering	Subject
XII.A	XII.A	Applicability
XII.A.1	XII.A	Applicability
XII.A.1.a through d.(ii)	XII.A.1.a through c	Applicability
XII.A.2	XII.D.4.	Exception to applicability of oil refineries.
XII.A.3	None	Applicability for natural gas-processing plants and certain natural gas compressor stations. Subject to Section XII.G. and XII.I.
XII.A.4	None	Applicability for certain glycol natural gas dehydrators, natural gas compressor stations, drip stations, or gas processing plants. Only subject to XII.B and XII.H.
XII.A.5	XII.A.8	Exception to applicability based on uncontrolled actual VOC emissions threshold of 30 tons per year.
XII.B	None	Definitions specific to section XII.
XII.B.1, 2, 3, 9, and 14.	XII.D.5, 8, 6, 1, and 9.	Definitions of various terms.
XII.B.4, 5, 6, 7, 8, 10, 11, and 12.	None	Definitions of various terms.
XII.C	XII.D	General provisions to section XII.
XII.C.1	None	General requirements for air pollution control equipment, leaks.
XII.C.1.a	XII.D.2.a	General requirements for operation/maintenance of

		control equipment.
XII.C.1.b	XII.D.2.b	General requirement to minimize leakage of VOCs.
XII.C.1.c	XII.A.7 and XII.A.4.h	Air pollution control - equipment control efficiency. Failure to operate and maintain control equipment at indicated locations is a violation.
XII.C.1.d	XII.D.2.c	Requirements for combustion devices.
XII.C.1.e	None	State-only requirements related to combustion devices.
XII.C.1.e.(iii)	None	Auto-igniter requirements for combustion devices.
XII.C.2 and XII.C.2.a	XII.D.3	Emission factors for emission estimates.
XII.D	XII.A.2	Emission control requirements for condensate tanks.
XII.D.2.a.(i) through (x)	XII.A.2.a through h	System-wide control requirements for condensate storage tanks.
XII.D.2.b	XII.A.9	Alternative emission control equipment.
XII.E	XII.A.3	Monitoring
XII.E.1	None	Requirements for control equipment other than a combustion device.
XII.E.2, XII.E.2.a and b	XII.A.3.a and b	Checks for combustion devices.
XII.E.3	XII.A.4.j	Documentation of inspections.
XII.E.3.a.-e	XII.A.3.c.-f	Requirements for the weekly check.
XII.F	XII.A.4 and XII.A.5	Recordkeeping and reporting requirements.
XII.F.1 and 2	XII.A.10 and 11	Marking of AIRS numbers on tanks.
XII.F.3	XII.A.4	Introductory language for recordkeeping.
XII.F.3.a(i)	XII.A.4.a	List of tanks and production

		volumes.
XII.F.3.a(ii) and (iii)	XII.A.4.b and c	Listing of emission factors and location and control efficiencies.
XII.F.3.a(iv)	XII.A.4.d.i	List weekly and monthly production values. Describes how to determine the averages.
XII.F.3.a(v)–(vii)	XII.A.4.d.ii–iv	List weekly and monthly uncontrolled actual and controlled actual emissions by tank and system-wide. List percent reductions weekly and monthly.
XII.F.3.a(viii)	XII.A.4.e	Note any downtime and account for it.
XII.F.3.a(ix)–(x)	XII.A.4.f–g	Maintaining and mailing of spreadsheet.
XII.F.3.b–d	XII.A.4.h–j	Failure to have control equipment as indicated on spread sheet is violation. Retain spread sheets for five years. Maintain records of inspections.
XII.F.4	XII.A.5	Reporting for system-wide requirements.
XII.F.4.a	XII.A.5.a	List tanks and production volumes.
XII.F.4.b–c	XII.A.5.b–c	List emission factor and location and control efficiency.
XII.F.4.d	XII.A.5.d	What different reports must show based on time of year. Emissions from individual tanks must be included.
XII.F.4.e	XII.A.5.e	What different reports must show based on time of year. Emissions system-wide.
XII.F.4.f	XII.A.5.f	What different reports must show based on time of year. Percent reduction system-wide.
XII.F.4.g	XII.A.5.g	Note shutdown of control

		equipment and account for same in totals.
XII.F.4.h	XII.A.5.h	State whether required reductions were achieved.
XII.F.4.i	XII.A.5.i	Include any information requested by the Division.
XII.F.4.j	XII.A.5.j	Retention period.
XII.F.4.k	XII.A.5.k	Additional reporting, monthly reporting of problems and corrective actions.
XII.F.4.l	XII.A.5.l	Before ozone season, identify tanks being controlled to meet system-wide control requirements.
XII.F.5	XII.A.6	Exemption from record-keeping and reporting requirements for natural gas compressor stations and drip stations authorized to operate pursuant to a construction or operating permit.
XII.G	XII.B	Requirements for gas processing plants. Introductory statement.
XII.G.1	XII.B.1	Part 60 leak detection applies.
XII.G.2	XII.B.2	Applicability of control equipment.
XII.G.3	XII.B.3	Compliance date for existing plants.
XII.G.4	XII.B.4	Compliance date for new plants.
XII.H.1	XII.C	Requirements that apply to vents from gas-condensate-glycol separators or tanks on glycol natural gas dehydrators at an oil and gas exploration and production operation, natural gas compressor station, drip station or gas-processing plant.
XII.H.3	XII.C	Control requirements application.

XII.H.3.b	XII.C	Control requirements application.
XII.H.4	None	Method for calculating emissions from vents.
XII.H.5	None	Monitoring and recordkeeping requirements for glycol natural gas dehydrators.
XII.H.6	None	Reporting requirements for glycol natural gas dehydrators.
XII.I		Natural gas compressor and drip station section XII requirements exemptions.

Section XII revises requirements for system-wide reductions in condensate storage tank VOC emissions. The current EPA-approved Section XII requires that uncontrolled actual condensate tank VOC emissions in the DMNFR area be reduced on a weekly basis during the summer ozone season by 75% system-wide beginning May 1, 2007, and 78% beginning May 1, 2012. Revised Section XII (Section XII.D.2) requires an 81% system-wide reduction in uncontrolled actual weekly condensate tank VOC emissions during the summer ozone season beginning May 1, 2009, an 85% reduction beginning May 1, 2010, and a 90% reduction beginning May 1, 2011. Section XII proposed revisions also include combustion device auto-igniter requirements, a leak detection and repair (LDAR) program applicable to natural gas processing plants, and emission reductions from glycol natural gas dehydrators requirements. Below, we describe in detail Colorado's proposed revisions to Section XII and the basis for our proposed approval of such revisions.

a. Section XII.A.

Section XII.A defines the applicability of Section XII requirements and is consistent with the current EPA-approved applicability provisions in Section XII.

b. Section XII.B.

Section XII.B contains definitions specific to Section XII. The substance of the definitions in Sections XII.B.1, 2, 3, 9, 12, and 14 is unchanged from the definitions contained in SIP approved Sections XII.D.1 and XII.D.5 through 9. The other definitions in revised Section XII.B define the following terms that are used in Section XII: auto-igniter, calendar week, condensate storage tank, downtime, existing, modified or modification, and new. The definitions are clear, straightforward, and accurate.

The definition of existing is only pertinent to State-only provisions and thus has no meaning for our SIP action.

c. Section XII.C.1.

Section XII.C.1 contains general requirements for air pollution control equipment and prevention of leakage. Section XII.C.1.e includes a provision requiring all combustion devices installed on or after January 1, 2017, used to control emissions of VOCs to be equipped with an operational auto-igniter. This new provision strengthens Colorado's SIP. The remaining Section XII.C.1 revisions do not change the substance of the corresponding EPA-approved provisions.

d. Section XII.C.2.

Section XII.C.2 describes the emission factors to be used for estimating emissions and emissions reductions from condensate storage tanks under Section XII. In the current EPA-approved SIP (Sections XII.D.3.b and 3.b.i), the emission factors to be used are specified for condensate storage tanks at natural gas compressor stations, natural gas drip stations, and gas-condensate-glycol separators. In revised Sections XII.C.2.a.(ii) and a.(ii)(A), Colorado deleted the reference to gas-condensate-glycol separators. Revised Section XII.H still requires a 90

percent reduction in emissions at certain gas-condensate-glycol separators. Emission calculation and monitoring and recordkeeping requirements established in XII.H.4, 5, and 6 provide for enforcement and compliance of emission reduction requirements in XII.H.1.

At the EPA's request, Colorado deleted the EPA approval requirement in XII.C.2.a.(ii)(B). The EPA is not involved in formal approval of site-specific emission factors and the EPA was concerned with previous SIP-approved language in XII.D.b.3.ii, which allowed for default SIP approval if the EPA did not object within 30 days to a test method approved by the Division to determine an emission factor.

e. Section XII.D.

Section XII.D contains an introductory statement regarding the control requirements for atmospheric condensate storage tanks. The changes to current SIP-approved Section XII.A.2 are minor and do not change the substance of the corresponding EPA-approved provisions.

f. Section XII.D.2.a.

Section XII.D.2.a. contains the system-wide control requirements for condensate storage tanks and adds an introductory statement clarifying requirements for installing air pollution control equipment on condensate storage tanks to achieve reductions outlined in Sections XII.D.2.a.(i) through (x). The current SIP provides for a weekly 75% system-wide VOC reduction during the summer ozone season beginning May 1, 2007, and 78% beginning May 1, 2012. The revised section significantly increases the summer ozone season weekly VOC reduction requirements from the current EPA-approved requirements, to 85% beginning in 2010 (revised Section XII.D.2.a.(ix)) and 90% beginning May 1, 2011, and each year thereafter

(revised Section XII.D.2.a.(x)). The revised Section XII.D.2.a. provides more stringent emission reductions than the current SIP and therefore strengthens the SIP.

g. Section XII.D.2.b.

Section XII.D.2.b is a renumbered version of current EPA-approved Section XII.A.9. This section contains a process for approval of alternative emissions control equipment and pollution prevention devices and processes. Among other things, the section specifies requirements for public participation and EPA approval. Colorado did not change the substance of this provision, but simply renumbered it from Section XII.A.9 to XII.D.2.b.

h. Section XII.E.

Section XII.E contains the monitoring requirements that are currently specified in EPA-approved Sections XII.A.3 and XII.A.4.j. Colorado retained the basic requirement for weekly inspections or monitoring. Colorado improved certain provisions. For example, under revised Section XII.E, an owner or operator must ensure not only that the control equipment is operating, but that it is operating properly. Revised Section XII.E.1 adds a requirement that owners or operators of control equipment other than a combustion device follow manufacturer's recommended maintenance and inspect the equipment to ensure proper maintenance and operation. Revised Section XII.E.3 (current XII.A.4.j) adds a requirement that the owner or operator document any corrective actions taken and the name of the individual performing the corrective actions resulting from a weekly inspection. Revised Sections XII.E.3.a through d. add the requirement that the owner or operator not only perform certain checks, but that the owner or operator document those checks. Revised Section XII.E.3.e adds a new requirement for owners or operators to conduct and document audio, visual, and olfactory inspections during liquids

unloading events for tanks with uncontrolled actual emissions of VOCs equal to or greater than six tons per year. These provisions strengthen the SIP.

i. Section XII.F.

Section XII.F contains recordkeeping and reporting requirements that are currently in EPA-approved Sections XII.A.4 and XII.A.5. The recordkeeping requirements specify information that must be listed on a spreadsheet that owners/operators must maintain. Many of the provisions are identical to those in the current EPA approved SIP.

In Sections XII.F.1 through 4, Colorado made a few substantive changes to the existing provisions. In revised Section XII.F.3, Colorado added a sentence requiring the owner or operator to track VOC reductions on a calendar weekly and calendar monthly basis to demonstrate compliance with system-wide VOC reduction requirements. Colorado also specified that owners/operators would need to use the Division-approved spreadsheet to track VOC emissions and reductions. These changes are reasonable and consistent with CAA requirements.

j. Section XII.F.3.

In revised Section XII.F.3.a(i), which requires the spreadsheet to list the condensate storage tanks subject to Section XII and the production volumes for each tank, Colorado specified that the spreadsheet must list monthly production volumes. Revised Section XII.F.3.a(iv) also requires the owner/operator to list the production volume for each tank as a weekly and monthly average based on the most recent measurement available and specifies the method for pro-rating that measurement over the weekly or monthly period.

Revised Section XII.F.3.c requires owners/operators to retain a copy of each weekly and monthly spreadsheet for five years instead of the three years required by current EPA-approved

Section XII.A.4.i. Revised Section XII.F.3.d requires owners/operators to maintain records of inspections required by Sections XII.C. and XII.E. for five years.

k. Section XII.F.4.

In revised Section XII.F.4, Colorado made minor changes to current EPA-approved reporting requirements. Revised Section XII.F.4.a requires the semiannual reports to list all condensate storage tanks subject to or used to comply with the system-wide reduction requirements, not just the tanks that are subject to such requirements. This reflects the change to the regulation that allows owners/operators to control tanks with emissions below the Air Pollutant Emission Notice (APEN) filing levels to meet the percent reduction requirement in Section XII.D.2. In revised Sections XII.F.4.d through f. Colorado clarified that the April 30 reports must include the monthly emissions information and the November 30 reports must include the weekly emissions information. In revised Section XII.F.4.g, Colorado deleted the requirement in current EPA-approved Section XII.A.5.g that the owner/operator note in the report list “the date the source believes the shutdown [of control equipment] occurred, including the basis for such belief.” This deletion is reasonable because the owner/operator is not likely to be able to make an accurate estimate of the date the shutdown occurred, and, thus, the information is not likely to be meaningful in an enforcement context.

In revised Section XII.F.4.h, Colorado clarified monthly versus weekly reporting requirements. In revised Section XII.F.4.j, Colorado increased the retention period for reports from 3 years to 5 years. These changes are consistent with CAA requirements.

l. Section XII.F.5.

Section XII.F.5 contains an exemption from Section XII's record-keeping and reporting requirements for owners/operators of natural gas compressor stations (NGCSs) or natural gas drip stations (NGDSs) authorized to operate pursuant to a construction permit or Title V operating permit if certain conditions are met. In our August 5, 2011 (76 FR 47443) proposed rulemaking, we expressed our concern with Colorado's removal of one of the conditions for this exemption contained in current EPA-approved Section XII.A.6. Colorado's current submission reinstates this exemption. Colorado therefore did not change the substance of this provision, but simply renumbered it from Section XII.A.6 to section XII.F.5, made minor typographical corrections, and updated section references.

m. Section XII.G.

Section XII.G specifies the control requirements applicable to gas processing plants and corresponds to current EPA-approved Section XII.B. The EPA-approved Section XII.B requires gas processing plants to meet the requirements in Section XII.B specifically applicable to such plants as well as the requirements in current EPA-approved Section XII.C, pertaining to certain still vents and vents from gas condensate-glycol separators, and Section XVI, pertaining to emissions from stationary and portable engines. Revised Section XII.G requires gas processing plants to additionally comply with the requirements of revised Section XII.B, the definitions section, revised Sections XII.C.1.a and XII.C.1.b, which specify maintenance and design requirements for control equipment and the obligation to minimize leakage of VOCs to the atmosphere, and revised Section XII.H, which specifies control requirements for still vents and vents flash separators or flash tanks on glycol natural gas dehydrators located at oil and gas exploration and production operations, natural gas compressor stations, drip stations, or gas-

processing plants. It appears that this change would strengthen the requirements applicable to gas-processing plants.

n. Section XII.G.1.

Section XII.G.1 specifies that NSPS leak detection and repair requirements apply regardless of the date of construction of the facility, and adds a reference to LDAR requirements in NSPS OOOO and OOOOa. Colorado made no substantive changes to this provision.

o. Section XII.G.2.

Section XII.G.2 is a renumbered and revised version of current EPA-approved Section XII.B.2. This provision specifies the applicability threshold for installation of control equipment at gas processing plants and the efficiency requirement for the control equipment. The EPA approved current Section XII.B.2 on August 19, 2005 (70 FR 48652). In current EPA-approved Section XII.B.2, the requirement to install control equipment is triggered if condensate storage tank throughput exceeds “APEN de minimis levels,” as set in the State’s Reg. No. 3, Part A, Section II.D. That regulation in turn specified that in attainment areas, the APEN requirement applied to sources with uncontrolled emissions of any criteria pollutant of less than two tons per year. For nonattainment areas, this de minimis threshold dropped to one ton per year. When the State submitted and the EPA approved section XII.B.2, the 8-hour ozone control area was still in attainment,⁴⁹ and therefore the APEN de minimis level referenced in Section XII.B.2 was two tons per year.

⁴⁹ The 1997 8-hour ozone NAAQS nonattainment designation for the DMNFR became effective November 20, 2007 (72 FR 53952 and 53953, September 21, 2007).

In 2008, along with renumbering section XII.B.2 to XII.G.2, Colorado revised the threshold in this provision to accurately reflect the original two-ton-per-year level.⁵⁰ The two-ton threshold in revised Section XII.G.2, therefore, would capture the same tanks as were being captured at the time Section XII.B.2 was approved into the State's SIP, and would also provide clarity as to the SIP requirements by removing a cross-reference that is arguably ambiguous. We propose to find that the revised section XII.G.2 is approvable because it clarifies the applicability threshold for determining which condensate storage tanks are subject to control requirements.

p. Section XII.G.3.

Section XII.G.3 specifies the compliance date for existing natural gas processing plants. Colorado did not change the substance of this provision.

q. Section XII.G.4.

Revised Section XII.G.4, which specifies the compliance date for new gas processing plants, adds a reference to Section XII.G. Colorado did not change the substance of this provision.

r. Section XII.H.1.

Section XII.H.1. specifies control requirements in current EPA-approved Section XII.C. for still vents and vents from gas-condensate-glycol separators on glycol natural gas dehydrators

⁵⁰ Colorado submitted this to the EPA as a SIP revision on July 18, 2009, but we disapproved the proposed revisions to section XII, including XII.G.2, with our August 11, 2011 rulemaking (76 FR 47443). In our proposal, as to XII.G.2. we stated that our proposed disapproval rested in part on uncertainty about the effect of the change from "APEN de minimis levels" to "greater than or equal to two tons per year," and in part on a revised control efficiency requirement that introduced a twelve-month averaging period. (75 FR 42346, 42358, July 21, 2010). Colorado has since removed the twelve-month averaging period, and as described in this notice we have concluded that the effect of the change to a specific two-ton-per-year threshold has the effect of clarifying the SIP, not weakening it. Accordingly, we are proposing to find that this provision is approvable.

at oil and gas exploration and production operations, natural gas compressor stations, drip stations, or gas-processing plants. Colorado did not change the substance of this provision.

s. Section XII.H.3.

XII.H.3 specifies that control requirements in Sections XII.H.1 and 2 apply where uncontrolled emissions of VOCs from glycol gas dehydrators are equal to or greater than one ton per year and the sum of actual uncontrolled emissions of VOCs from any single or grouping of glycol natural gas dehydrators at a single source is greater than 15 tons per year. Revised Section XII.H clarifies current EPA-approved Section XII.C's applicability threshold for control requirements.

t. Section XII.H.4.

Section XII.H.4 adds a requirement for calculating emissions from still vents and vents from flash separators or flash tanks on glycol natural gas dehydrators to ensure the 90 percent VOC emission reduction requirements in XII.H.1 are achieved. This provision strengthens the SIP.

u. Section XII.H.5.

Section XII.H.5. adds monitoring and recordkeeping requirements for enforcement and compliance of emission reduction requirements in XII.H.1. XII.H.5.a requires owners and operators of natural gas dehydrators to check on a weekly basis that condensers and air pollution equipment control equipment are operating properly, and to document dates of inspections, problems observed, and descriptions and dates of corrective actions taken. XII.H.5.b requires owners and operators to check and document on a weekly basis that pilot lights on combustion devices are lit, that valves for piping gas to pilot lights are open, and to check for smoke.

XII.H.5.c requires owners and operators to document any maintenance of the condenser or air pollution control equipment consistent with manufacturer specifications or good engineering practices, and XII.H.5.d requires owners or operators to retain records for a period of 5 years. Although there are requirements to check for and document any problems observed while inspecting condenser or air pollution control equipment, the State does not require any corrective action be taken to fix the problem. The EPA recommends the State add requirements for corrective action to be taken. However, even as is, the provision strengthens the SIP, and therefore the absence of a corrective action requirement within it does not form a basis for disapproval.

v. Section XII.H.6.

The reporting requirements included in section XII.H.6 support additional enforcement and compliance efforts in connection with the emission reduction requirements in XII.H.1. Under XII.H.6.a, owners or operators submit to the Division on a semiannual basis a list of glycol natural gas dehydrators subject to section XII.H, a list of condensers or air pollution control equipment used to control emissions of VOCs, and dates of inspections when condensers or air pollution control equipment was found not to be operating properly. This provision strengthens the SIP.

w. Section XII.I.

Section XII.I is entirely new. It adds an exemption from the otherwise applicable requirements of Section XII for an owner or operator of any natural gas compressor station or natural gas drip station, but only if the owner or operator applies control equipment designed to achieve a VOC control efficiency of at least 95% to each condensate storage tank or tank battery

with uncontrolled VOC emissions greater than or equal to two tons per year and meets certain other requirements. This is more stringent than the system-wide requirement because it requires 95% control at each tank or tank battery over the threshold rather than a maximum of 90% control system-wide. Recordkeeping and reporting requirements in XII.I.4 provide for enforcement and compliance of emission reduction requirements in XII.I. This provision strengthens the SIP.

Based on our analysis of Section XII changes, we find that revisions are clerical in nature, do not change the substance of currently approved SIP provisions, or are SIP strengthening provisions. The State has not yet submitted a RACT analysis for this source category. Colorado has until October 27, 2018, to submit SIP revisions to address requirements of the EPA's oil and gas CTG published in 2016 (*see* footnote 37 of this notice). We therefore we propose approving the changes in Section XII.

iv) Section XIII

Section XIII regulates VOC emissions from graphic arts and printing processes.

a. Sections XIII.A.

Changes to Section XIII.A are clerical in nature and do not affect the substance of the requirements.

b. Section XIII.B.

Section XIII.B addresses VOC emissions from the use of fountain solutions, cleaning materials, and inks at lithographic and letterpress printing operations. XIII.B.1 includes general provisions of the rule including definitions, applicability, and work practice requirements, and VOC content limits for inks. Section XIII.B.2 outlines requirements for cleaning materials used

at offset lithographic printing and letterpress printing operations and exempted materials and operations. Section XIII.B.3 contains requirements for the use of fountain solutions at offset lithographic printing operations, sheet-fed printing operations, and for non-heatset web printing. Section XIII.B.4 sets forth control requirements for heatset web offset lithographic and heatset web letterpress printing operations. Requirements include reducing VOC emissions from heatset dryers through an emission control system with a control efficiency of 90% or greater and 95% or greater for control devices installed on or after January 1, 2017. Section XIII.B.4.d outlines exemptions from control requirements in Section XIII.B.4. Finally, XIII.B.5⁵¹ contains monitoring, recordkeeping, and reporting requirements for compliance with VOC emission reduction requirements in XIII.B.4. We find that the provisions are consistent with CAA requirements and CTGs, and that they strengthen the SIP.

Therefore, we propose to approve the changes in Section XIII.

v) Section XVI

Section XVI specifies emission control requirements for stationary and portable engines and other combustion equipment.

a. Section XVI.A.-XVI.C.

Revisions in Sections XVI.A through XVI.C make grammatical changes and update references to section numbers. Colorado did not change the substance of this provision.

b. Section XVI.D.

⁵¹ Section XIII.B.5. contains a numbering error. The State has committed to correcting the errors in Section XIII.B.5.a. in a subsequent SIP revision which are currently numbered “XIII.E.5.a.,” “XIII.E.5.b.,” and “XIII.E.5.c.”

Section XVI.D. adds a combustion adjustment requirement for individual pieces of combustion equipment at major sources of NO_x in Section XVI.D. The requirements in Section XVI.D apply to some equipment that is not subject to work practices under the NESHAPs that have uncontrolled actual NO_x emissions equal to or greater than 5 tpy. Sections XVI.D.2.a-d include inspection and adjustment requirements for boilers, process heaters, duct burners, stationary combustion turbines, and stationary internal combustion engines. Section XVI.D.2.e requires owners and operators to operate and maintain equipment subject to Section XVI.D consistent with manufacturer's specifications or good engineering and maintenance practices. Section XVI.D.2.f outlines combustion adjustment frequency requirements and Section XVI.D.3 includes recordkeeping requirements for owners and operators when implementing combustion process adjustments. Section XVI.D.4 sets forth alternative options to the requirements in Sections XVI.D.2.a-e and XVI.D.3.a including conducting combustion process adjustments according to manufacturer's recommended procedures and schedules, or conducting tune-ups or adjustments according to schedules and procedures of applicable NSPS or NESHAPs. We find that the provisions in Section XVI.D are consistent with Clean Air Act requirements and CTGs, and that they strengthen the SIP.

For the reasons previously explained, we propose to approve the changes in Section XVI. vi) Section XIX.

Section XIX establishes RACT requirements for emission points at major sources of VOC and NO_x in the DMNFR area. We will be acting on Colorado's RACT demonstration for major sources and revisions to Section XIX in a future rulemaking.

V. Proposed Action

We propose to approve the SIP submittal from the State of Colorado for the DMNFR ozone nonattainment area submitted on May 31, 2017. Specifically, we propose to approve the following:

- Attainment demonstration with weight of evidence analysis for the 2008 ozone NAAQS;
- Base and future year emissions inventories;
- RFP Demonstration;
- Demonstration of RACT for VOC CTG sources (except for the following CTG source categories as to which we are not taking any action at this time: Metal Furniture Coatings, 2007; Miscellaneous Metal Products Coatings, 2008; Wood Furniture Manufacturing Operations, 1996; Industrial Cleaning Solvents, 2006; Aerospace, 1997; and Oil and Natural Gas Industry, 2016.);
- Demonstration of RACM implementation;
- Motor vehicle I/M program revisions in Colorado's Reg. No. 11;
- NNSR program;
- Contingency measures plan;
- MVEBs; and
- Revisions to Colorado's Reg. No. 7 (except for revisions to Reg. No. 7, Section X pertaining to VOC controls of industrial cleaning solvents and Reg. No. 7, Section XIX revisions pertaining to RACT requirements for major sources as to which we are not taking any action).

We also propose to approve SIP revisions to Reg. No. 7 submitted by the State on May 13, 2013, except for provisions that have been superseded by later submissions, as to which we are not taking any action. We propose these actions in accordance with section 110 and part D of the CAA.

VI. Incorporation by Reference

In this rule, the EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference Colorado Regulation Number 11 pertaining to regulation of the State's motor vehicle emissions inspection program and Colorado Regulation Number 7 pertaining to regulation of sources of VOC and NO_x emissions discussed in section IV., J. Motor Vehicle Inspection and Maintenance Program (I/M) Program and N. SIP Control Measures of this preamble. The EPA has made, and will continue to make, these materials generally available electronically through www.regulations.gov and in hard copy at the appropriate EPA office (please contact the person identified in the "For Further Information Contact" section of this preamble for more information).

VII. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this final action:

- is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide the EPA with the discretionary authority to address, as appropriate,

disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Greenhouse gases, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Authority: 42 U.S.C. 7401 et seq.

Dated: March 29, 2018

Douglas H. Benevento,
Regional Administrator,
Region 8.

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